

AUTOMATIC PLUNGER CATCHER AND RELEASER AND CHEMICAL LAUNCHER FOR A WELL TUBING METHOD AND APPARATUS

ABSTRACT OF THE DISCLOSURE

An automated plunger catcher and releaser and chemical launcher for a well tubing method and apparatus. In one configuration, arrival of a plunger is sensed as the plunger ascends from the wellbore through the production tubing and a signal is sent to a controller. A signal is sent from the controller to actuate a stem in order to hold the plunger in a surface catcher chamber. A flowline is thereafter closed by signal from the controller in order to stop fluid flow through the production tubing. A signal is sent from the controller to an actuated valve on a chemical launcher, thereby opening the valve and releasing chemical. Thereafter, the valve is closed to stop release of chemical. The plunger is held in position for a predetermined time and then the stem is retracted in order to permit the plunger to fall by gravity. Finally, the flowline is opened in order to permit fluid flow therethrough and the process is sequentially repeated as desired.